

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN REGION**

STATEMENT OF BASIS
APPLICATION FOR
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT
AND
WASTE DISCHARGE REQUIREMENTS
TO DISCHARGE TO STATE WATERS

Public Notice No. 7-01-17
Application NPDES No. CA0104990
Board Order No. 01-103

ISG Energy, LLC (Owner/Operator)
Mesquite Lake Resource Recovery
3559 Highway 111
Imperial, CA 92251

On the basis of preliminary staff review and application of lawful standards and regulations, the Regional Board proposed to renew waste discharge requirements for the discharge. The tentative proposed determinations are described below.

I. Description of Proposed Discharge

The permittee proposes to operate and generate an existing power generating facility at 3559 Highway 111, about six (6) miles south of Brawley, in the County of Imperial. The facility is an electrical power generation plant, which utilizes tire-derived fuel (TDF) as a "Green" fuel site. Major activities involve the conveyance of TDF to a fluidized bed furnace producing steam generation power via a turbine generator.

The facility generates approximately 15-17 megawatts of electricity. Natural gas is used as a supplemental fuel source.

The permittee proposes to discharge approximately 170,000 gallons-per-day of industrial wastewater into Rose Drain in the SW ¼ of Section 27, T14S, R14E, SBB&M. The Rose Drain is a tributary to the Alamo River; which is a tributary to the Salton Sea

II. Beneficial Uses of the Receiving Waters

A. Rose Drain

1. Fresh Water Replenishment for Salton Sea (FRSH)
2. Water Contact Recreation (REC I)
3. Non-Contact Water Recreation (REC II)
4. Warm Water Habitat (WARM)
5. Wildlife Habitat (WILD)
6. Preservation of Rare, Endangered or Threatened Species (RARE)

B. Alamo River

1. Fresh Water Replenishment for Salton Sea (FRSH)
2. Water Contact Recreation (REC I)
3. Non-Contact Water Recreation (REC II)
4. Warm Water Habitat (WARM)
5. Wildlife Habitat (WILD)
6. Preservation of Rare, Endangered or Threatened Species (RARE)

C. Salton Sea

1. Aquaculture (AQ)
2. Water Contact Recreation (REC I)
3. Non-Contact Water Recreation (REC II)
4. Warm Water Habitat (WARM)
5. Wildlife Habitat (WILD)
6. Presentation of Rare, Endangered or Threatened Species (RARE)

III. Proposed Effluent Limitations

Wastewater discharged to the Rose Drain shall not contain constituents in excess of the following limits:

| <u>Constituent</u> | <u>Unit</u> | <u>Criterion Maximum Concentration</u> | <u>30-Day Arithmetic Mean¹ Discharge Concentration</u> |
|------------------------------|-------------------|--|---|
| Total Suspended Solids (TSS) | mg/L ² | 100.0 | 30.0 |
| Total Dissolved Solids (TDS) | mg/L | 4500 | 4000 |
| Copper (Total) | mg/L | 0.05 | -- |
| Zinc | µg/L ³ | 120 | -- |
| Chromium (Total) | mg/L | 0.02 | -- |
| Iron | mg/L | 1.0 | -- |
| Total Phosphorus | mg/L | 0.1 | -- |
| Residual Chlorine | mg/L | 0.02 | 0.01 |

The effluent values of hydrogen ion (pH) shall remain within the limits of 6.0 to 9.0.

¹ 30 Day Arithmetic Mean = The arithmetic mean of pollutant parameter values of samples collected in a period of 30 consecutive days as specified in the Monitoring and Reporting Program.

² mg/L = Milligrams per Liter

³ µg/L = Micrograms per Liter

There shall be no discharge in detectable amounts of any of EPAs designated 126 priority pollutants [40CFR Part 423.15 (j)(1)], except as set forth for applicable constituents in Proposed Effluent Limitation III. E. (above).

There shall be no acute toxicity in the effluent being discharged to Rose Drain. The effluent shall not contain heavy metals, chemicals, pesticides, or other constituents in concentrations toxic to aquatic life.

The applicable requirements of the California Toxic Rule and the State's Policy for implementation of toxic standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California are part of the basis for the effluent limitation in this Order.

IV. Basis of Effluent Limitations

Effluent discharged from this facility could contain pollutants in sufficient quantities to affect receiving water quality. Pursuant to Section 13263, Article 4, Chapter 4 of the Porter Cologne Water Quality Control Act, the Regional Boards are required to issue Waste Discharge Requirements for discharges that could affect the quality of the State's waters. Furthermore, Federal Regulation 40 CFR 122.1 requires the issuance of NPDES permits for pollutants discharged from a point source to the waters of the United States. The draft discharge requirements contain specific discharge limitations for selected pollutants. The rationales for each of the limitations is as follows:

| <u>Constituent</u> | <u>Basis for Limitations</u> |
|---------------------------------|---|
| Total Suspended Solids | High levels of suspended solids can adversely impact aquatic habitat. Untreated or improperly treated wastewater can contain high amounts of suspended solids. |
| Total Dissolved Solids | Increasing levels of dissolved solids are adversely impacting the Salton Sea. Wastewater effluent can contain high amounts of dissolved solids. |
| Settleable Matter | High levels of settleable matter can have an adverse effect on aquatic habitat. Untreated or improperly treated wastewater can contain high amounts of settleable matter. |
| Zinc, Copper, Chromium and Iron | High levels of these constituents have an adverse affect on aquatic organisms and their uses (i.e. consumption by humans and wildlife) in the receiving water. |
| Chlorine | High levels of chlorine can have an adverse affect on aquatic life. Chlorine is one of the chemicals used in treating the cooling tower water. |
| Total Phosphorus | High levels of phosphorus are having an impact on receiving waters and the Salton Sea. Wastewater effluent can contain high amounts of phosphorus. |

| <u>Constituent</u> | <u>Basis for Limitations</u> |
|--------------------|---|
| Toxicity | Toxicity testing ensures that the effluent does not contain metals, chemicals, pesticides or other constituents in concentrations toxic to aquatic life. |
| Hydrogen Ion (pH) | pH is a measure of Hydrogen Ion concentration in the water. A range specified between 6 to 9 ensures suitability for biological life. This limitation has been adopted in the Basin Plan of the Region. |

V. Basis of Receiving Water Limitations:

Receiving water limitations have been established for the protection of aquatic life.

VI. Monitoring Requirements

Monitoring for those pollutants expected to be present in the Outfall 001 will be required as shown on the proposed monitoring and reporting program.

VII. Information Sources

- (1) EPA NPDES Applications Forms submitted by the discharger.
- (2) 40CFR parts 117, 122, 123, 124, 136, 302, 403, and 503.
- (3) Water Quality Control Plan (Colorado River Basin – Region 7) dated 1994.
- (4) Regional Board files related to New Charleston Power I.
- (5) Porter-Cologne Water Quality Control Act with additions and amendments effective January 1, 2000.
- (6) Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California adopted March 2, 2000.
- (7) California Toxics Rule, (CTR) published by May 18, 2000 by U.S. EPA.
- (8) National Toxics Rule (NTR) adopted by U.S. EPA on February 5, 1993.

Written Comments

Interested parties are invited to submit written comments on these draft waste discharge requirements. Comments should be submitted in writing by June 23, 2001 to:

Executive Officer
California Regional Water Quality Control Board
Colorado River Basin Region
73-720 Fred Waring Drive, Suite 100
Palm Desert, CA 92260

The application number should appear on the first page of any submitted comments. All comments received by the above date will be considered in the formulation of the final determinations.

Public Hearing

The waste discharge requirements will be considered by the Regional Board at a public hearing to be held at the City Council Chambers, City of La Quinta, 78-495 Calle Tampico, La Quinta on September 5, 2001.

Register of Interested Persons

Any person interested in a particular application or group of applications may leave his/her name, address and phone number as part of the file for the application. This list of names will be maintained as a means for persons with an interest in an application to contact others with similar interests.

Information and Copying

Copies of the application, proposed waste discharge requirements and other documents (other than those that the Regional Board's Executive Officer maintains as confidential) are available at the Regional Board office for inspection and copying.

For additional information, interested persons may write to the above address, or call Jennie Snyder, Water Resources Control Engineer, at (760) 776-8966.